

Notice of Allowability

Application No.

10/806,366

Applicant(s)

GONG, XUE SHENG

Examiner

Justin W. Rider

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07 November 2007.
2. ☒ The allowed claim(s) is/are 21-37.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Response to Amendment

1. In response to the Office Action mailed 28 August 2007, applicant submitted a response filed 07 November 2007, in which the applicant added claims 21-37 without adding new matter. Claims 1-20 have been cancelled.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Amy Zhou on 30 January 2008.

3. Please amend the claims as follows.

21. (New) A computer-implemented Chinese spelling scheme on a keyboard, comprising:

a. using special-purpose letters for marking tones wherein the spelling form is in conformity with the international phonetic symbols and the corresponding Latin alphabet;

b. wherein the letters used for spelling and tone marks do not go beyond the range of 26 English letters except unstressed tone mark; and

c. using "replacement-sequencing-retrieval" (RSR) to arrange words in order.

22. (New) The scheme of claim 21, further comprising using Q, V, W, and X as unique Chinese tone marks (using ' as the unstressed tone mark), wherein each tone mark follows each monosyllable.

24. (New) The scheme of claim 21, wherein all initial consonants and vowels form syllables independently:

YI→I, WU→U, YIN→IN, WEN→UN, YUN→YN, YONG→YNG, ZH→ZR, CH→CR, SH→SR, RI→R, ZI→Z, CI→C, SI→S.

25. (New) The scheme of claim 21, wherein when -NG follows behind a vowel letter and together consists of a compound vowel of a syllable, omit and replace with 'G': ANG→AG, ENG→EG, ING→IG, UNG→UG, YNG→YG.

27. (New) The scheme of claim 21, wherein RSR consists of:

a. neglect the tone letter for the main key word and consider the tone letter in secondary key word when arranging words in an order;

b. for the syllables of beginning with pairs of initial consonants (CH, SH, ZR, CR, SR), rank them together and also give consideration to tones: (1) replacing in the order of Q→1, V→2, W→3, X→4, CH→CWH, CR→CXR, SH→SWH, SR→SXR, ZR→ZXR; (2) sequencing; (3) retrieving in an order according to CWH→CH, CXR→CR, SWH→SH, SXR→SR, ZXR→ZR, 1→Q, 2→V, 3→W, 4→X;

c. for index of syllables, use the order: A, B, C, Ch, Cr, D, E, F, G, H, I, J, K, L, M, N, O, P, R, S, Sh, Sr, T, U, Y, Z, Zr.

28. (New) A computer-implemented scheme of Chinese alphabetic writing, comprising:

- a. applying a sound and tone letter omitted spelling method to those characters with high-frequency monosyllabic meanings;
- b. an abbreviating method for the terminology words and grammar words;
- c. wherein for specific characters in all kinds of identifications or in articles needing to be distinguished, such as names of people, places, mountains, rivers, etc., applying a method of adding a Chinese "code note".

33. (New) A computer-implemented scheme of phonetic symbols, comprising:
using 26 English letters as phonetic symbols, wherein:

- a. when the letter identifications of the existing phonetic symbols are in conformity with the English letters in commonly used keyboard, keep the identifications (B, P, TS, DZ, etc.);
- b. when the letter identifications of the existing phonetic symbols are not in conformity with the English letters in a commonly used keyboard, use the single letter identification form which is relative to the pronouncing phoneme at the picture or which has the corresponding spelling: ([l]→[i], [u]→[u], [v]→[a], [tʃ]→[q], [ʃ]→[x]), [ə]→[e].
- c. when the letter identification is not in conformity with the English letter in commonly used keyboard, and does not have an individual corresponding letter, use the combination under three letters: [ə(r)]→[er], [ɔ:(r)]→[or], [v:(r)]→[ar], [ei]→[ei], [ai]→[ai], [əu]→[eu], [au]→[au], [ɪə(r)]→[ir], [ʊə(r)]→[ur], [aɪə(r)]→[air], [aʊə(r)]→[aur], [ju:]→[juu], [jʊə(r)]→[jur].

36. (New) The scheme of claim 33, wherein marking the stressed syllable with the accent mark in commonly used English keyboard, the second accent is not marked.

Allowable Subject Matter

4. Claims 21-37 are allowed. The following is an examiner's statement of reasons for allowance: A thorough search of available prior art did result in a plurality of references discussing various methods of Chinese character representation. For example, **George (US Patent No. 5,832,478)**, **Chen (US Patent No. 6,073,146)** and **Lu (US Patent No. 6,587,819)** all discuss certain variations of the known Pinyin character representation. However, most references are forced into utilizing special characters or cumbersome letter, number and symbol combinations in order to represent even the simplest Chinese characters. The scheme as claimed by applicant avoids using any numbers or special characters and uses a replacement sequencing retrieval system that is well suited for use on standard QWERTY keyboards as well as portable device keypads.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER